Speckled tortoises (*Homopus signatus*) collected in the wild to reinforce the studbook

In September 2015, five male and five female *Homopus signatus* were collected in the wild (South Africa) and exported to Europe to broaden the genetic basis of the studbook population. The collection and export were the result of intensive efforts to decide upon a long-term aim for the captive population and to draw up a formal <u>studbook management plan</u>. This process started in 2008. Drafts of the studbook management plan were reviewed by all studbook participants and by the South African authorities. The studbook on *H. signatus* aims to develop a captive population that is suitable and available for possible reintroductions in the wild in the next 100 years, if the need for reintroduction would arise. Consequently, the genetic composition of the population is carefully managed. All tortoises in the studbook have been transferred to studbook participants on loan and may only be bred if the production of offspring is beneficial for the studbook population. The development of the population is summarised in <u>annual reports</u>.

The studbook on *H. signatus* is led by the Homopus Research Foundation in collaboration with the European Studbook Foundation. An important benefit of this collaboration is the continuity that it provides; the European Studbook Foundation is a reservoir of experienced studbook keepers ensuring that successive studbook keepers will continue to develop the studbook over the next decades. The studbook itself contains many participants who go great lengths to learn about *H. signatus* and to optimise husbandry and breeding conditions.



A large proportion of the studbook participants has participated in fieldwork on the taxon and the collecting of the new founders in 2015 would not have been possible without the help of volunteers Olda Mudra, Sérgio Paulo Lopes Silva and Sam Beales.



The South African authorities do not easily provide permits to collect tortoises in the wild. It was the first time in 14 years that live *H. signatus* legally entered Europe, and the previous import in 2001 was for the same studbook (all tortoises still alive). The Homopus Research Foundation and the European Studbook Foundation take great pride in the fact that the authorities have issued permits to pursue the aim of the studbook. One permit condition was that the tortoises should be collected in areas that are unlikely to sustain *H.*

signatus in the future due to anthropogenic disturbance. Some of the *H. signatus* were collected under waste materials from a site were houses were constructed.



The new founder tortoises have been distributed among existing studbook participants, who were selected based on the chances they offer for the tortoises to play their important role in the studbook. The tortoises will be acclimated to northern hemisphere climatic conditions along a detailed protocol that was drawn up based on results acclimating other South African tortoises and lizards in the past.

Upon arrival in Europe, all tortoises were sampled for parasites (viruses, bacteria, protozoa, helminths, ticks) by Martijn

Kooijman. The samples will be analysed at the University of Camerino (Italy), providing insight in parasites hosted by wild *H. signatus*. The results will be published in an international scientific journal.

The Studbook Management Plan will be updated to include the new founders. Furthermore, the 2015 annual report of the Homopus Research Foundation will report the results of the acclimation of the tortoises.

Victor Loehr Homopus Research Foundation 27 September 2015